

Title (en)  
PERMANENT MAGNET MOTOR DEVICE HAVING WINDING COIL WITH VARIABLE TURNS AND CONTROL METHOD THEREOF

Title (de)  
PERMANENTMAGNETMOTORVORRICHTUNG MIT WICKELSPULE MIT VARIABLEN WINDUNGEN UND STEUERVERFAHREN DAFÜR

Title (fr)  
DISPOSITIF DE MOTEUR À AIMANT PERMANENT AYANT UNE BOBINE D'ENROULEMENT À SPIRES VARIABLES ET SON PROCÉDÉ DE COMMANDE

Publication  
**EP 3719964 A4 20210630 (EN)**

Application  
**EP 17934292 A 20171207**

Priority  
CN 2017000719 W 20171207

Abstract (en)  
[origin: US2020212746A1] A kind of permanent magnet motor device with coil windings that have variable numbers of turns. The device may include windings and a power supply. The windings may include multiple coils. The power supply may connect to the coils through a switching device and cause these coils in various combinations of series connections or parallel connections to achieve a motor with increased power savings, torque, rotation speed, or power.

IPC 8 full level  
**H02P 25/18** (2006.01); **H02K 3/28** (2006.01); **H02K 21/14** (2006.01)

CPC (source: EP KR US)  
**H02K 3/28** (2013.01 - EP KR US); **H02K 21/14** (2013.01 - EP); **H02P 25/18** (2013.01 - EP KR US); **H02K 2213/09** (2013.01 - EP); **H02P 2207/05** (2013.01 - EP)

Citation (search report)

- [X] US 2016204728 A1 20160714 - NOTOHARA YASUO [JP], et al
- [X] WO 2016051456 A1 20160407 - JOHNSON CONTROLS HITACHI AIR CONDITIONING TECHNOLOGY HONG KONG LTD [CN]
- See references of WO 2019109196A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**US 2020212746 A1 20200702**; BR 112020011293 A2 20201117; EP 3719964 A1 20201007; EP 3719964 A4 20210630; JP 2021505122 A 20210215; KR 20200085298 A 20200714; MX 2020007053 A 20200909; WO 2019109196 A1 20190613

DOCDB simple family (application)  
**US 201716500407 A 20171207**; BR 112020011293 A 20171207; CN 2017000719 W 20171207; EP 17934292 A 20171207; JP 2020547261 A 20171207; KR 20207015910 A 20171207; MX 2020007053 A 20171207